UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

NOTICE OF RELEASE
UNIOLA PANICULATA, SEAOATS
CAMINADA GERMPLASM

The USDA, Natural Resources Conservation Service (NRCS) announce the release and naming of a source-identified ecotype of *Uniola paniculata*.

Caminada Germplasm is assigned the NRCS accession number 9068262. Caminada is released to provide a locally adapted ecotype for use on low profile sand dunes, and for dune enhancement and sand stabilization on coastal beaches and barrier islands of the north central coast of the Gulf of Mexico.

NOMENCLATURE

Scientific Name - *Uniola paniculata* L.
Common Name - Seaoats
Germplasm - Caminada is the selected germplasm name that will be used for the 9068262 release. There are no known cultivar releases of *Uniola* paniculata, though there are commercial sources available.

DESCRIPTION

Caminada seaoats is a warm season native perennial grass that spreads primarily by rhizomes. Culms (stems) are 1-2 m tall with glabrous (without hairs) nodes and internodes. Leaves are basal with long attenuate blades to 6 dm in length and 4-10 mm wide. Both surfaces of the leaf blade, margins, and sheaths are glabrous. Dense panicles are 2-5 dm long and 0.5-1.5 dm wide with glabrous ascending branches. Spiklets are flat and yellowish 1.5-3 cm long and 1-1.5 cm wide. The lower 2 to 6 spikelets are sterile. Glumes are faintly nerved, scabrous 7-10 mm long. Fertile lemmas are faintly nerved 8-10 mm long. Sterile lemmas (4) are also faintly nerved, 8-10 mm long. Paleas are 2-winged, eiliolate, scarious margins, and slightly longer than lemmas. Flowers are perfect with 3 stamens and 2 lodicules that are fleshy and cuneate. Ovaries are glabrous with a single style and 2 plumose stigmas. Caryopsis are linear with an embryo less than one-half the length of the grain. Basic chromosome number is x = 10. Sea oats is distributed on beaches and sand dunes from Alabama south to Florida, the Bahamas, Islands of the Caribbean, and the Gulf Coast of the United States and Mexico. Typical occurrence of sea oats associated with Louisiana's Gulf Coast is on barrier islands (Chandeleur and adjacent islands) east of the Mississippi River.

ENVIRONMENTAL IMPACT ASSESSMENT

Caminada seaoats is selected and propagated from naturally occurring germplasm and has not been altered from the original collection. Caminada does not meet the assessment of a plant which could become invasive based on guidelines adopted by the NRCS Plant Materials Program.

ORIGIN AND SITE DESCRIPTION

Caminada seaoats was collected from a naturally occurring colony of seaoats located on Fourchon Beach (N29 10', W90 10') Lafourche Parish, Louisiana. A small colony of plants was found growing on a low-profile beach dune in 1995. Caminada has persisted, and stabilized the beach dune through several catastrophic weather events that have caused considerable erosion, plant community loss, and damage to Fourchon Beach. Dominant plants found in association include bitter panicum, and marshhay cordgrass. Caminada has been observed to be more tolerant to salt spray, storm surges, and rapid sand accretion in comparison to other plants found growing in association on this site.

Soil associated with this site is mapped as Felicity loamy fine sand, frequently flooded (FE). This is a very gently sloping, somewhat poorly drained, saline, sandy soil on low ridges along the coast of the Gulf of Mexico. Elevations range from about 1 foot to 3 feet above sea level. This soil is subject to flooding by saltwater during high storm tides. Felicity soil has low fertility and is saline. A water table that fluctuates with the normal tides is within 2 to 3 feet of the surface.

METHOD OF SELECTION

Caminada seaoats is a pre-varietal release, collected and propagated from a native colony to provide a locally adapted ecotype. Plant materials were vegetatively propagated and increased for performance testing between 1997 and 1999. Caminada has demonstrated exceptional survival, growth, and persistence.

USE AND ADAPTATION

Caminada seaoats is intended for use on coastal beaches and barrier islands of the north central Gulf coast, primarily Louisiana west of the Mississippi River. Caminada seaoats perform best when planted on the crest and Gulf side of the primary dune. Though plants are successfully established and perform well on the leeward side of the primary dune.

RELEASE JUSTIFICATION

Caminada seaoats has application as a vegetative component in Louisiana's coastal restoration program. This ecotype is of known origin and proven performance for planting and establishment on Louisiana coastal beach dunes and barrier islands.

Seaoats is an important dune enhancing and stabilizing plant typically found on the barrier islands of Louisiana east of the Mississippi River delta. Sea oats is not typically found growing west of the Mississippi River. Caminada is a cloned plant material propagated from a naturally occurring colony of sea oats found growing on a low profile beach west of the Mississippi River. Caminada has demonstrated characteristics that allow it to grow and persist on; low profile beaches subject to storm surge overwash, and sites affected by salt spray, and rapidly accreting sand that is arid and low in fertility.

AVAILABILITY OF PLANT MATERIALS

Caminada seaoats is established vegetatively, seed is not available. Plants are propagated by plant division. Rooted container stock of any size provides the highest probability of survival and planting success. Containerized plant materials will be available through coastal wetland plant growers in Louisiana.

Foundation plant materials for commercial nursery production is available form the **USDA,** Natural Resources Conservation Service, Golden Meadow Plant Materials Center. The Golden Meadow Plant Materials Center is located at **438** Airport Road, Galliano, Louisiana. The Center can be reached by calling **985-475-5280 or** by FAX at **985-475-6545.**

References

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